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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/319,156

11/02/1999

GLAUCIA PARANHOS-BACCALA

103514

2490

25944

7590

05/13/2009

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

PARKIN, JEFFREY S

ART UNIT

PAPER NUMBER

1648

MAIL DATE

DELIVERY MODE

05/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/319,156	Applicant(s) PARANHOS-BACCALA ET AL.	
	Examiner Jeffrey S. Parkin	Art Unit 1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,7,9,14,15,26,60-64 and 66 is/are pending in the application.
- 4a) Of the above claim(s) 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,7,9,14,15,60-64 and 66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Application No.: 09/319,156
Applicants: Paranhos-Baccala, G., et al.

Docket No.: 103514
Filing Date: 11/02/99

Detailed Office Action

Status of the Claims

As set forth in the advisory action dated 11 December, 2008, the finality of the final rejection dated 27 March, 2008, has been withdrawn. The amendment-after-final filed 29 September, 2008, has been entered. Claims 1, 7, 9, 14, 15, 26, 60-64, and 66 are pending in the instant application. Claim 26 stands withdrawn from further consideration by the examiner, pursuant to 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention (see the restriction requirement mailed 16 February, 2001).

35 U.S.C. § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The previous rejection of claims 1, 7, 14, 15, and 60-64 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is hereby withdrawn in response to applicants' amendment.

35 U.S.C. § 112, First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Written Description

The previous rejection of claims 1, 7, 9, 14, 15, and 60-64 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, is hereby withdrawn in view of applicants' amendment.

35 U.S.C. § 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The previous rejection of claims 1, 7, 14, 15, and 60 under 35 U.S.C. § 102(b) as being clearly anticipated by Boehringer Mannheim (1994), is hereby withdrawn in response to applicants' amendment.

35 U.S.C. § 119

Acknowledgment is hereby made of applicants' claim for foreign priority based on FR 97/08816 filed 07 July, 1997. It is noted, however, that applicants have **NOT** filed a certified copy **AND** English translation of this application as required by 35 U.S.C. § 119(b). Accordingly, the foreign priority claim has **NOT** been entered.

35 U.S.C. § 102(e)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 7, 9, 14, 15, 60, 61, 63, and 66 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Perron *et al.* (2003, U.S. Patent No. 6,582,703 B2).¹ Perron and associates provide isolated polynucleotides that are identical to SEQ ID NOS. 6, 9, 10, and 12 (see SEQ ID NOS.: 102, 105, 106, and 108,

1. The earliest effective filing date of U.S. Patent No. 6,582,703 B2 is 26 November, 1997.

respectively). Thus, this teaching meets all of the claimed limitations.

35 U.S.C. § 103(a)

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 62 and 64 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Perron et al. (2003, U.S. Patent No. 6,582,703 B2). Claim 62 is directed toward isolated genomic DNA comprising SEQ ID NOS. 6, 9, or 12 and claim 64 is directed toward an expression vector comprising the claimed SEQ ID NOS. As set forth *supra*, Perron and associates provide isolated polynucleotides that are identical to SEQ ID NOS. 6, 9, and 12 (see SEQ ID NOS.: 102, 105, and 108, respectively). This teaching does not disclose isolated genomic DNA comprising these sequences or expression vectors comprising said sequences. However, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to isolate the claimed retroviral sequences from a number of sources (e.g., genomic DNA comprising proviral copies of the retrovirus) to facilitate further genotypic/phenotypic

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characterization of the virus. One of ordinary skill in the art would have also been motivated to place the claimed sequences in an expression vector to encode the corresponding protein. The protein would obviously be useful for the generation of a number of immunological, biochemical and diagnostic reagents.

Correspondence

Any inquiry concerning this communication should be directed to Jeffrey S. Parkin, Ph.D., whose telephone number is (571) 272-0908. The examiner can normally be reached Monday through Thursday from 10:30 AM to 9:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Larry R. Helms, can be reached at (571) 272-0832. Direct general status inquiries to the Technology Center 1600 receptionist at (571) 272-1600. Informal communications may be submitted to the Examiner's RightFAX account at (571) 273-0908.

Applicants are reminded that the United States Patent and Trademark Office (Office) requires most patent related correspondence to be: a) faxed to the Central FAX number (571-273-8300) (updated as of July 15, 2005), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), c) mailed to the mailing address set forth in 37 C.F.R. § 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450), or d) transmitted to the Office using the Office's Electronic Filing System. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence. For further information refer to the Updated Notice of Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence, and Exceptions Thereto, 1292 Off. Gaz. Pat. Office 186 (March 29, 2005).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully,

/Jeffrey S. Parkin/

Jeffrey S. Parkin, Ph.D.
Primary Examiner, Art Unit 1648

10 May, 2009

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

**Appendix A: Sequence Search Results for
U.S. Serial No. 09/319,156**

SEQ ID NO.: 6

RESULT 1

US-08-979-847B-102

; Sequence 102, Application US/08979847B

; Patent No. 6582703

; GENERAL INFORMATION:

; APPLICANT: PERRON, HERVE

; BESEME, FREDERIC

; BEDIN, FREDERIC

; PARANHOS-BACCALA, GLAUCIA

; KOMURIAN-PRADEL, FLORENCE

; JOLIVET-REYNAUD, COLETTE

; MANDRAND, BERNARD

; GARSON, JEREMY

; TUKE, PHILIP

; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR

DIAGNOSTIC,

; PROPHYLACTIC AND THERAPEUTIC PURPOSES

; NUMBER OF SEQUENCES: 210

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: OLIFF & BERRIDGE, PLC

; STREET: P.O. BOX 19928

; CITY: ALEXANDRIA

; STATE: VA

; COUNTRY: USA

; ZIP: 22320

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/979,847B

; FILING DATE: 26-No. 6582703-1997

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: BERRIDGE, WILLIAM P.

; REGISTRATION NUMBER: 30,024

; REFERENCE/DOCKET NUMBER: WPB 39046A

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6400

; TELEFAX: 703-836-2787

; INFORMATION FOR SEQ ID NO: 102:

; SEQUENCE CHARACTERISTICS:

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; LENGTH: 635 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 102:
US-08-979-847B-102

Query Match 100.0%; Score 635; DB 4; Length 635;
Best Local Similarity 100.0%; Pred. No. 2e-203;
Matches 635; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

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Qy      1 CCCTGTATCTTTAACCTCCTTGTTAAGTTTGTCTCTTCCAGAATCAAAACTGTAAACTA 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 CCCTGTATCTTTAACCTCCTTGTTAAGTTTGTCTCTTCCAGAATCAAAACTGTAAACTA 60

Qy     61 CAAATTGTTCTTCAAATGGAGCACCAGATGGAGTCCATGACTAAGATCCACCGTGGACCC 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 CAAATTGTTCTTCAAATGGAGCACCAGATGGAGTCCATGACTAAGATCCACCGTGGACCC 120

Qy    121 CTGGACCGCCTGCTAGCCCATGCTCCGATGTTAATGACATTGAAGGCACCCCTCCCGAG 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 CTGGACCGCCTGCTAGCCCATGCTCCGATGTTAATGACATTGAAGGCACCCCTCCCGAG 180

Qy    181 GAAATCTCAACTGCACAACCCCTACTATGCCCAATTGAGCGGGAAGCAGTTAGAGCGGT 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 GAAATCTCAACTGCACAACCCCTACTATGCCCAATTGAGCGGGAAGCAGTTAGAGCGGT 240

Qy    241 CATCAGCCAACCTCCCCAACAGCACTTGGGTTTTCTGTTGAGAGGGGGGACTGAGAGAC 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 CATCAGCCAACCTCCCCAACAGCACTTGGGTTTTCTGTTGAGAGGGGGGACTGAGAGAC 300

Qy    301 AGGACTAGCTGGATTTTCCTAGGCCAACGAAGAATCCCTAAGCCTAGCTGGGAAGGTGACT 360
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 AGGACTAGCTGGATTTTCCTAGGCCAACGAAGAATCCCTAAGCCTAGCTGGGAAGGTGACT 360

Qy    361 GCATCCACCTCTAAACATGGGGCTTGCAACTTAGCTCACACCCGACCAATCAGAGAGCTC 420
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    361 GCATCCACCTCTAAACATGGGGCTTGCAACTTAGCTCACACCCGACCAATCAGAGAGCTC 420

Qy    421 ACTAAAATGCTAATTAGGCAAAAAATAGGAGGTAAAGAAATAGCCAATCATCTATTGCCTG 480
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    421 ACTAAAATGCTAATTAGGCAAAAAATAGGAGGTAAAGAAATAGCCAATCATCTATTGCCTG 480

Qy    481 AGAGCACAGCGGGAGGGACAAGGATCGGGATATAAACCAGGCATTCGAGCCGGCAACGG 540
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    481 AGAGCACAGCGGGAGGGACAAGGATCGGGATATAAACCAGGCATTCGAGCCGGCAACGG 540

Qy    541 CAACCCCTTTGGGTCCCTCCCTTTGTATGGGCGCTCTGTTTTCACTCTATTTCACTCT 600
        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    541 CAACCCCTTTGGGTCCCTCCCTTTGTATGGGCGCTCTGTTTTCACTCTATTTCACTCT 600

Qy    601 ATTAAATCTTGCAACTGAAAAAAAAAAAAAAAAAAAA 635
        ||||||||||||||||||||||||||||||||||||||
Db    601 ATTAAATCTTGCAACTGAAAAAAAAAAAAAAAAAAAA 635
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Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

SEQ ID NO.: 9

RESULT 1

US-08-979-847B-105

; Sequence 105, Application US/08979847B

; Patent No. 6582703

; GENERAL INFORMATION:

; APPLICANT: PERRON, HERVE

; BESEME, FREDERIC

; BEDIN, FREDERIC

; PARANHOS-BACCALA, GLAUCIA

; KOMURIAN-PRADEL, FLORENCE

; JOLIVET-REYNAUD, COLETTE

; MANDRAND, BERNARD

; GARSON, JEREMY

; TUKE, PHILIP

; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR
DIAGNOSTIC, PROPHYLACTIC AND

; THERAPEUTIC PURPOSES

; NUMBER OF SEQUENCES: 210

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: OLIFF & BERRIDGE, PLC

; STREET: P.O. BOX 19928

; CITY: ALEXANDRIA

; STATE: VA

; COUNTRY: USA

; ZIP: 22320

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/979,847B

; FILING DATE: 26-No. 6582703-1997

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: BERRIDGE, WILLIAM P.

; REGISTRATION NUMBER: 30,024

; REFERENCE/DOCKET NUMBER: WPB 39046A

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6400

; TELEFAX: 703-836-2787

; INFORMATION FOR SEQ ID NO: 105:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1481 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 105:
US-08-979-847B-105

Query Match 100.0%; Score 1481; DB 4; Length 1481;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1481; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

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Qy      1 ATGGCCCTCCCTTATCATACTTTTCTCTTTACTGTTCTCTTACCCCTTTTCGCTCTCACT 60
        |||||||
Db      1 ATGGCCCTCCCTTATCATACTTTTCTCTTTACTGTTCTCTTACCCCTTTTCGCTCTCACT 60

Qy     61 GCACCCCTCCATGCTGCTGTACAACCAGTAGCTCCCCTTACCAAGAGTTTCTATGAAGA 120
        |||||||
Db     61 GCACCCCTCCATGCTGCTGTACAACCAGTAGCTCCCCTTACCAAGAGTTTCTATGAAGA 120

Qy    121 ACGCGGCTTCCTGGAAATATTGATGCCCCATCATATAGGAGTTTATCTAAGGGAAACTCC 180
        |||||||
Db    121 ACGCGGCTTCCTGGAAATATTGATGCCCCATCATATAGGAGTTTATCTAAGGGAAACTCC 180

Qy    181 ACCTTCACTGCCCACACCCATATGCCCCGCAACTGCTATAACTCTGCCACTCTTTGCATG 240
        |||||||
Db    181 ACCTTCACTGCCCACACCCATATGCCCCGCAACTGCTATAACTCTGCCACTCTTTGCATG 240

Qy    241 CATGCAAATACTCATTATTGGACAGGGAAAATGATTAATCCTAGTTGTCCTGGAGGACTT 300
        |||||||
Db    241 CATGCAAATACTCATTATTGGACAGGGAAAATGATTAATCCTAGTTGTCCTGGAGGACTT 300

Qy    301 GGAGCCACTGTCTGTTGGACTTACTTCACCCATACCAGTATGTCTGATGGGGTGGAATT 360
        |||||||
Db    301 GGAGCCACTGTCTGTTGGACTTACTTCACCCATACCAGTATGTCTGATGGGGTGGAATT 360

Qy    361 CAAGGTCAGGCAAGAGAAAAACAAGTAAAGGAAGCAATCTCCCAACTGACCCGGGGACAT 420
        |||||||
Db    361 CAAGGTCAGGCAAGAGAAAAACAAGTAAAGGAAGCAATCTCCCAACTGACCCGGGGACAT 420

Qy    421 AGCACCCCTAGCCCCTACAAAGGACTAGTTCTCTCAAACTACATGAAACCCTCCGTACC 480
        |||||||
Db    421 AGCACCCCTAGCCCCTACAAAGGACTAGTTCTCTCAAACTACATGAAACCCTCCGTACC 480

Qy    481 CATACTCGCCTGGTGAGCCTATTTAATACCACCCTCACTCGGCTCCATGAGGTCTCAGCC 540
        |||||||
Db    481 CATACTCGCCTGGTGAGCCTATTTAATACCACCCTCACTCGGCTCCATGAGGTCTCAGCC 540

Qy    541 CAAAACCCTACTAACTGTTGGATGTGCCTCCCCCTGCACTTCAGGCCATACATTTCAATC 600
        |||||||
Db    541 CAAAACCCTACTAACTGTTGGATGTGCCTCCCCCTGCACTTCAGGCCATACATTTCAATC 600

Qy    601 CCTGTTCTGAACAATGGAACAACCTTCAGCACAGAAATAAACACCACTTCCGTTTTAGTA 660
        |||||||
Db    601 CCTGTTCTGAACAATGGAACAACCTTCAGCACAGAAATAAACACCACTTCCGTTTTAGTA 660

Qy    661 GGACCTCTTGTGTTTCCAATCTGGAAATAACCCATACCTCAAACCTCACCTGTGTAAATTT 720
        |||||||
Db    661 GGACCTCTTGTGTTTCCAATCTGGAAATAACCCATACCTCAAACCTCACCTGTGTAAATTT 720
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Qy	721	AGCAATACTATAGACACAACCAGCTCCCAATGCATCAGGTGGGTAACACCTCCCACACGA	780
Db	721	AGCAATACTATAGACACAACCAGCTCCCAATGCATCAGGTGGGTAACACCTCCCACACGA	780
Qy	781	ATAGTCTGCCTACCTCAGGAATATTTTTTGTCTGTGGTACCTCAGCCTATCATTGTTTG	840
Db	781	ATAGTCTGCCTACCTCAGGAATATTTTTTGTCTGTGGTACCTCAGCCTATCATTGTTTG	840
Qy	841	AATGGCTCTTCAGAATCTATGTGCTTCCTCTCATTCTTAGTGCCCCCTATGACCATCTAC	900
Db	841	AATGGCTCTTCAGAATCTATGTGCTTCCTCTCATTCTTAGTGCCCCCTATGACCATCTAC	900
Qy	901	ACTGAACAAGATTTATACAATCATGTCGTACCTAAGCCCCACAACAAAAGAGTACCCATT	960
Db	901	ACTGAACAAGATTTATACAATCATGTCGTACCTAAGCCCCACAACAAAAGAGTACCCATT	960
Qy	961	CTTCCTTTTGTATCAGAGCAGGAGTGCTAGGCAGACTAGGTACTGGCATTGGCAGTATC	1020
Db	961	CTTCCTTTTGTATCAGAGCAGGAGTGCTAGGCAGACTAGGTACTGGCATTGGCAGTATC	1020
Qy	1021	ACAACCTCTACTCAGTTCTACTACAACTATCTCAAGAAATAAATGGTGACATGGAACAG	1080
Db	1021	ACAACCTCTACTCAGTTCTACTACAACTATCTCAAGAAATAAATGGTGACATGGAACAG	1080
Qy	1081	GTCACTGACTCCCTGGTCACCTTGCAAGATCAACTTAACTCCCTAGCAGCAGTAGTCCTT	1140
Db	1081	GTCACTGACTCCCTGGTCACCTTGCAAGATCAACTTAACTCCCTAGCAGCAGTAGTCCTT	1140
Qy	1141	CAAAATCGAAGAGCTTTAGACTTGCTAACCGCCAAAAGAGGGGGAACCTGTTTATTTTTTA	1200
Db	1141	CAAAATCGAAGAGCTTTAGACTTGCTAACCGCCAAAAGAGGGGGAACCTGTTTATTTTTTA	1200
Qy	1201	GGAGAAGAACGCTGTTATTATGTTAATCAATCCAGAATTGTCAGTGAAGTTAAAGAA	1260
Db	1201	GGAGAAGAACGCTGTTATTATGTTAATCAATCCAGAATTGTCAGTGAAGTTAAAGAA	1260
Qy	1261	ATTCGAGATCGAATACAATGTAGAGCAGAGGAGCTTCAAAACACCGAACGCTGGGGCCTC	1320
Db	1261	ATTCGAGATCGAATACAATGTAGAGCAGAGGAGCTTCAAAACACCGAACGCTGGGGCCTC	1320
Qy	1321	CTCAGCCAATGGATGCCCTGGGTTCTCCCTTCTTAGGACCTCTAGCAGCTCTAATATTG	1380
Db	1321	CTCAGCCAATGGATGCCCTGGGTTCTCCCTTCTTAGGACCTCTAGCAGCTCTAATATTG	1380
Qy	1381	TTACTCCTCTTTGGACCCTGTATCTTTAACCTCCTTGTTAAGTTTGTCTCTCCAGAATT	1440
Db	1381	TTACTCCTCTTTGGACCCTGTATCTTTAACCTCCTTGTTAAGTTTGTCTCTCCAGAATT	1440
Qy	1441	GAAGCTGTAAAGCTACAGATGGTCTTACAAATGGAACCCCA	1481
Db	1441	GAAGCTGTAAAGCTACAGATGGTCTTACAAATGGAACCCCA	1481

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

SEQ ID NO.: 10

RESULT 1

US-08-979-847B-106

; Sequence 106, Application US/08979847B

; Patent No. 6582703

; GENERAL INFORMATION:

; APPLICANT: PERRON, HERVE

; BESEME, FREDERIC

; BEDIN, FREDERIC

; PARANHOS-BACCALA, GLAUCIA

; KOMURIAN-PRADEL, FLORENCE

; JOLIVET-REYNAUD, COLETTE

; MANDRAND, BERNARD

; GARSON, JEREMY

; TUKE, PHILIP

; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR
DIAGNOSTIC, PROPHYLACTIC AND

; THERAPEUTIC PURPOSES

; NUMBER OF SEQUENCES: 210

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: OLIFF & BERRIDGE, PLC

; STREET: P.O. BOX 19928

; CITY: ALEXANDRIA

; STATE: VA

; COUNTRY: USA

; ZIP: 22320

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/979,847B

; FILING DATE: 26-No. 6582703-1997

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: BERRIDGE, WILLIAM P.

; REGISTRATION NUMBER: 30,024

; REFERENCE/DOCKET NUMBER: WPB 39046A

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6400

; TELEFAX: 703-836-2787

; INFORMATION FOR SEQ ID NO: 106:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 493 amino acids

; TYPE: amino acid

; STRANDEDNESS: single

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 106:
US-08-979-847B-106

Query Match 99.9%; Score 2632; DB 4; Length 493;
Best Local Similarity 100.0%; Pred. No. 2.8e-262;
Matches 493; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

Qy	1	MALPYHTFLFTVLLPPFALTAPPPCCCTTSSSPYQEFLXRTRLPGNIDAPSYRSLSKGNS	60
Db	1	MALPYHTFLFTVLLPPFALTAPPPCCCTTSSSPYQEFLXRTRLPGNIDAPSYRSLSKGNS	60
Qy	61	TFTAHTHMPRNCYNSATLCMHANTHYWTGKMINPSCPGGLGATVCWTFYFHTSMSDGGGI	120
Db	61	TFTAHTHMPRNCYNSATLCMHANTHYWTGKMINPSCPGGLGATVCWTFYFHTSMSDGGGI	120
Qy	121	QQQAREKQVKEAISQLTRGHSTSPYKGLVLSKLHETLRTHRLVSLFNTTLTRLHEVSA	180
Db	121	QQQAREKQVKEAISQLTRGHSTSPYKGLVLSKLHETLRTHRLVSLFNTTLTRLHEVSA	180
Qy	181	QNPTNCWMCLPLHFRPYISIPVPEQWNNFSTEINTTSVLVGPLVSNLEITHTSNLTCVKF	240
Db	181	QNPTNCWMCLPLHFRPYISIPVPEQWNNFSTEINTTSVLVGPLVSNLEITHTSNLTCVKF	240
Qy	241	SNTIDTTSSQCIRWVTPPTRIVCLPSGIFVCGTSAYHCLNGSSESMCFLSFLVPPMTIY	300
Db	241	SNTIDTTSSQCIRWVTPPTRIVCLPSGIFVCGTSAYHCLNGSSESMCFLSFLVPPMTIY	300
Qy	301	TEQDLYNHVVPKPHNKRVPILPFVIRAGVLGRLGTGIGSITTSTQFYKLSQEINGDMEQ	360
Db	301	TEQDLYNHVVPKPHNKRVPILPFVIRAGVLGRLGTGIGSITTSTQFYKLSQEINGDMEQ	360
Qy	361	VTDSLVTLQDQLNSLAAVVLQNRALDLLTAKRGGTCLFLGEERCYYVNSRIVTEKVKE	420
Db	361	VTDSLVTLQDQLNSLAAVVLQNRALDLLTAKRGGTCLFLGEERCYYVNSRIVTEKVKE	420
Qy	421	IRDRIQCRAEELQNTERWGLLSQWMPWVLPFLGPLAALILLLLFGPCIFNLLVKFVSSRI	480
Db	421	IRDRIQCRAEELQNTERWGLLSQWMPWVLPFLGPLAALILLLLFGPCIFNLLVKFVSSRI	480
Qy	481	EAVKLQMVLMQEP	493
Db	481	EAVKLQMVLMQEP	493

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

SEQ ID NO.: 12

RESULT 1

US-08-979-847B-108

; Sequence 108, Application US/08979847B

; Patent No. 6582703

; GENERAL INFORMATION:

; APPLICANT: PERRON, HERVE

; BESEME, FREDERIC

; BEDIN, FREDERIC

; PARANHOS-BACCALA, GLAUCIA

; KOMURIAN-PRADEL, FLORENCE

; JOLIVET-REYNAUD, COLETTE

; MANDRAND, BERNARD

; GARSON, JEREMY

; TUKE, PHILIP

; TITLE OF INVENTION: VIRAL MATERIAL AND NUCLEOTIDE FRAGMENTS
; ASSOCIATED WITH MULTIPLE SCLEROSIS, FOR

DIAGNOSTIC, PROPHYLACTIC AND

; THERAPEUTIC PURPOSES

; NUMBER OF SEQUENCES: 210

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: OLIFF & BERRIDGE, PLC

; STREET: P.O. BOX 19928

; CITY: ALEXANDRIA

; STATE: VA

; COUNTRY: USA

; ZIP: 22320

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/979,847B

; FILING DATE: 26-No. 6582703-1997

; CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: BERRIDGE, WILLIAM P.

; REGISTRATION NUMBER: 30,024

; REFERENCE/DOCKET NUMBER: WPB 39046A

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 703-836-6400

; TELEFAX: 703-836-2787

; INFORMATION FOR SEQ ID NO: 108:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 1329 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; SEQUENCE DESCRIPTION: SEQ ID NO: 108:
US-08-979-847B-108

Query Match 99.8%; Score 1326; DB 4; Length 1329;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1329; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

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Qy      1 TCAAAATCGAAGAGCTTTAGACTTGCTAACCGCCAAAAGAGGGGAACCTGTTATTTTT 60
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 TCAAAATCGAAGAGCTTTAGACTTGCTAACCGCCAAAAGAGGGGAACCTGTTATTTTT 60

Qy     61 AGGGGAAGAATGCTGTTAGTATGTTAATCAATCTGGAATCATTACTGAGAAAGTTAAAGA 120
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 AGGGGAAGAATGCTGTTAGTATGTTAATCAATCTGGAATCATTACTGAGAAAGTTAAAGA 120

Qy    121 AATTTGAGATCGAATATAATGTAGAGCAGAGGACCTTCAAAACACTGCACCCTGGGGCCT 180
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 AATTTGAGATCGAATATAATGTAGAGCAGAGGACCTTCAAAACACTGCACCCTGGGGCCT 180

Qy    181 CCTCAGCCAATGGATGCCCTGGACTCTCCCCTTCTTAGGACCTCTAGCAGCTATAATATT 240
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    181 CCTCAGCCAATGGATGCCCTGGACTCTCCCCTTCTTAGGACCTCTAGCAGCTATAATATT 240

Qy    241 TTTACTCCTCTTTGGACCCTGTATCTTCAACTTCCTTGTTAAGTTTGTCTCTTCCAGAAT 300
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 TTTACTCCTCTTTGGACCCTGTATCTTCAACTTCCTTGTTAAGTTTGTCTCTTCCAGAAT 300

Qy    301 TGAAGCTGTAAAGCTACAAATAGTTCTTCAAATGGAACCCAGATGCAGTCCATGACTAA 360
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 TGAAGCTGTAAAGCTACAAATAGTTCTTCAAATGGAACCCAGATGCAGTCCATGACTAA 360

Qy    361 AATCTACCGTGGACCCCTGGACCGGCCTGCTAGACTATGCTCTGATGTTAATGACATTGA 420
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    361 AATCTACCGTGGACCCCTGGACCGGCCTGCTAGACTATGCTCTGATGTTAATGACATTGA 420

Qy    421 AGTCACCCCTCCCGAGGAAATCTCAACTGCACAACCCCTACTACACTCCAATTCAGTAGG 480
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    421 AGTCACCCCTCCCGAGGAAATCTCAACTGCACAACCCCTACTACACTCCAATTCAGTAGG 480

Qy    481 AAGCAGTTAGAGCAGTTGTGAGCCAACCTCCCCAACAGTACTTGGGTTTTCTGTTGAGA 540
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    481 AAGCAGTTAGAGCAGTTGTGAGCCAACCTCCCCAACAGTACTTGGGTTTTCTGTTGAGA 540

Qy    541 GGGTGGACTGAGAGACAGGACTAGCTGGATTTCCTAGGCTGACTAAGAATCCCNAGCCT 600
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    541 GGGTGGACTGAGAGACAGGACTAGCTGGATTTCCTAGGCTGACTAAGAATCCCNAGCCT 600

Qy    601 ANCTGGGAAGGTGACCGCATCCATCTTTAAACATGGGGCTTGCAACTTAGCTCACACCCG 660
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    601 ANCTGGGAAGGTGACCGCATCCATCTTTAAACATGGGGCTTGCAACTTAGCTCACACCCG 660

Qy    661 ACCAATCAGAGAGCTCACTAAAATGCTAATCAGGCACAAAACAGGAGGTAAAGCAATAGCC 720
        ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    661 ACCAATCAGAGAGCTCACTAAAATGCTAATCAGGCACAAAACAGGAGGTAAAGCAATAGCC 720
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Application No.: 09/319,156

Docket No.: 103514

Applicants: Paranhos-Baccala, G., et al.

Filing Date: 11/02/99

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Qy      721 AATCATCTATTGCCTGAGAGCACAGCGGGAAGGACAAGGATTGGGATATAAACTCAGGCA 780
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Db      721 AATCATCTATTGCCTGAGAGCACAGCGGGAAGGACAAGGATTGGGATATAAACTCAGGCA 780

Qy      781 TTCAAGCCAGCAACAGCAACCCCTTTGGGTCCCCTCCCATTGTATGGGAGCTCTGTTTT 840
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Db      781 TTCAAGCCAGCAACAGCAACCCCTTTGGGTCCCCTCCCATTGTATGGGAGCTCTGTTTT 840

Qy      841 CACTCTATTTCACTCTATTAAATCATGCAACTGCACTCTTCTGGTCCGTGTTTTTTATGG 900
        |||
Db      841 CACTCTATTTCACTCTATTAAATCATGCAACTGCACTCTTCTGGTCCGTGTTTTTTATGG 900

Qy      901 CTCAAGCTGAGCTTTTGTTCGCCATCCACCACTGCTGTTTGCCACCGTCACAGACCCGCT 960
        |||
Db      901 CTCAAGCTGAGCTTTTGTTCGCCATCCACCACTGCTGTTTGCCACCGTCACAGACCCGCT 960

Qy      961 GCTGACTTCCATCCCTTTGGATCCAGCAGAGTGTCCTGTGCTCCTGATCCAGCGAGGT 1020
        |||
Db      961 GCTGACTTCCATCCCTTTGGATCCAGCAGAGTGTCCTGTGCTCCTGATCCAGCGAGGT 1020

Qy      1021 ACCCATTGCCACTCCCGATCAGGCTAAAGGCTTGCCATTGTTCTCTGCATGGCTAAGTGCC 1080
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Db      1021 ACCCATTGCCACTCCCGATCAGGCTAAAGGCTTGCCATTGTTCTCTGCATGGCTAAGTGCC 1080

Qy      1081 TGGGTTTGTCTAATAAGAACTGAACACTGGTCACTGGGTTCATGGTTCTCTTCCATGAC 1140
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Db      1081 TGGGTTTGTCTAATAAGAACTGAACACTGGTCACTGGGTTCATGGTTCTCTTCCATGAC 1140

Qy      1141 CCACGGCTTCTAATAGAGCTATAAACTCACCAGCATGGCCCAAGATTCCATTCCTTGGA 1200
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Db      1141 CCACGGCTTCTAATAGAGCTATAAACTCACCAGCATGGCCCAAGATTCCATTCCTTGGA 1200

Qy      1201 TCTGTGAGGCCAAGAACCCAGGTCAGAGAANGTGAGGCTTGCCACCATTGGGAAGTGG 1260
        |||
Db      1201 TCTGTGAGGCCAAGAACCCAGGTCAGAGAANGTGAGGCTTGCCACCATTGGGAAGTGG 1260

Qy      1261 CCCACTGCCATTTTGGTAGCGGCCACCACCATCTGGGAGCTGTGGGAGCAAGGATCCC 1320
        |||
Db      1261 CCCACTGCCATTTTGGTAGCGGCCACCACCATCTGGGAGCTGTGGGAGCAAGGATCCC 1320

Qy      1321 CCAGTAACA 1329
        |||
Db      1321 CCAGTAACA 1329
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